

November 17, 2011

To: Climate Change Program Attention: Elissa Lynn Department of Water Resources P.O. Box 94236-0001 Sacramento, CA 94236-0001

Dana and David Dornsife Statement of Qualifications for Dr. Lowell Stott

College of Letters, Arts and Sciences

Dear Elissa,

Department of Earth Sciences

I wish to express my interest in participating in the Climate Change Technical Advisory Group.

I am professor of Earth Sciences at the University of Southern California. Over the past 22 years I have conducted climate change research and taught climate science at both the undergraduate and graduate level. My research program is dedicated to uncovering the factors that influence climate variability and change across a wide range of temporal and spatial scales.

I am currently leading an interdisciplinary investigation that seeks to identify what factors were responsible for the recurrence of decadal-length drought in the southwestern US over the past several centuries. This project brings together observational specialists and climate modeling specialists and leverages an archive of paleoclimate data about past droughts. We are utilizing a suite of state of the art global climate models and regional climate models to conduct experiments that attempt to replicate past droughts and thereby develop an ability to anticipate and eventually predict future drought.

The University of Southern California hosts the High Performance Computer Center cluster we use for the computer simulations. We are using a suite of state-of-the-art global and regional models. This project is also training 5 post-doctoral fellows and several graduate students. This is a collaborative effort and quite unique in its interdisciplinary formulation. We anticipate rapid advances in our understanding as a result of this interdisciplinary approach. The students and post-doctoral fellows are gaining special training and experience that will better prepare them for climate research challenges in the 21st century.

I am also conducting research that is supported by the National Ocean and Atmospheric Administration (NOAA) to study how ocean and atmospheric variability on interannual to decadal time scales influences sources of moisture that falls as precipitation along the west coast of North America. We are using the stable isotopic composition of precipitation as a 'finger-print' to identify contributions of tropical and extratropical moisture. Tropical and extratropical moisture differ in isotopic composition and this difference allows us to study how and why the amount of moisture from these regions varies in time and space. We are conducting measurements of precipitation from multiple stations and this includes the network of North American Depositional Program (NADP) sites along the west coast. We combine these observational results with climate model experiments that allow us to identify what governs the convergence of tropical and extratropical moisture over the west coast. This is a particularly valuable technique because the isotopic signature of moisture is

transferred to soil moisture, lakes and ice. It is also imprinted on the isotopic composition of paleo-archives such as tree cellulose. The isotopic composition in these archives can be measured and by doing so, we reconstruct the history of hydroclimate variability for times in the past, particularly during drought. We believe this is particularly important research because global climate models used to simulate 21st century climate response to rising greenhouse gases as part of the Intergovernmental Panel on Climate Change (IPCC) AR4 report, project northward shift in winter season storm tracks along the west coast as temperatures rise. Such a response in storm track behavior would affect the isotopic composition of moisture and we can monitor this as a means of evaluating how the climate system is responding today to rising temperatures and how it responded in the past to rising temperatures.

I have served on many national and international planning and organizational committees over the years. I am particularly interested in working with DWR and other specialists in a collaborative and interdisciplinary effort to inform our understanding of climate variability and change in California.

Thank you,

Lowell Stott

Curriculum Vita of Lowell Stott

Department of Earth Sciences Phone: (213) 740-5120; University of Southern California FAX: (213) 740-8801 Los Angeles, CA 90089-0740 E-mail: Stott@usc.edu Citizenship: US.

EDUCATION:

PhD. 1989 The Graduate School of Oceanography, University of Rhode Island, Oceanography. MS 1985, BS 1982 Ohio State University, Geology

EMPLOYMENT:

2003-present Professor. Department of Earth Sciences, University of Southern California, Los Angeles.
1996-2003. Associate Professor. Department of Earth Sciences, University of Southern California, Los Angeles.

1989-1996. Assistant Professor. Department of Earth Sciences, University of Southern California, Los Angeles.

1987-89 Post Graduate Research Geologist. Marine Science Institute, University of California, Santa Barbara.

1985-87 Graduate Research Associate. Graduate School of Oceanography, University of Rhode Island. 1983-85 Graduate Research Associate. Institute of Polar Studies, Ohio State University

AWARDS

2007 World Affairs Council Distinguished Lecturer

1985 Antarctic Service Medal, National Science Foundation

1985 Department Service Award, Dept. of Geological Sciences, Ohio State University

1982 Senior Thesis Award

SYNERGISTIC ACTIVITIES

1995-1997 Hancock Marine Institute Executive Committee, University of Southern California

1994- 1995 Vice-Chairman Stable Isotope Research Group, SEPM (Society of Sedimentary Geology)

1994-1995 National Science Foundation, Atmospheric Sciences-Steering Committee Abrupt Climate Change Initiative

1993-1996 United States Scientific Advisory Committee to the Ocean Drilling Program (USSAC)

1993-1996 American Geophysical Union Paleoceanography Committee

2002-2007 National Science Foundation Ocean Sciences Steering Committee

Marine Aspects of Earth System History (MESH)

2004-2007 Chair, National Science Foundation Earth System History Science Steering Committee

COMMUNITY SERVICE

- 1. Convenor, JOI, USSAC conference on Paleogene paleoceanography, Lake Arrowhead Conference Center 1990. 40 national and international scientists attended
- 2. Convenor, Cushman Symposium, Geological Society Am. Annual Meeting Events near the Paleocene/Eocene Boundary. 1991
- 3. Participant, International Geological Correlation Project # 308. 1990-1997

 Scientific program to identify criteria for recognition of a Paleocene/Eocene stratotype section.
- 4. Organized and hosted Department of Geological Sciences Open House for Environmental Geology 1992.
- 5. Established the Earth Science Paleoenvironmental Seminar, 1993. This is now a weekly seminar for students and faculty to discuss current research and hear from invited speakers.

- 6. Participant, Center to Advance Pre-college Science Education (CAPSE). 1994. Summer program which designs new ways to incorporate science into elementary school education in Los Angeles City Schools.
- 7. National Science Foundation (NSF) proposal review panels (1994, 1995 and 2002, 2010).
- 8. Member of MESH Science Steering Committee (Marine Aspects of Earth System History). This panel represents the marine community in on-going global change initiatives sponsored by the NSF. 2000-2005
- 9. Convenor: Special Session on Holocene climate change at 1997 American Geophysical Union annual Meeting.
- 10. US Scientific Advisory Committee to the Ocean Drilling Program. 1993-1996
- 11. Convenor: Special Session on climate of the last 2000 years at the 2002 American Geophysical Union annual meeting.
- 12. Convenor: Workshop on Tropical Climate Variability, USC 2003.
- 13. Chair- Marine Aspects of Earth System History (MESH) Science Committee 2001-2007.
- 14. National Ocean and Atmospheric Review Committee, 2004 NOAA- Paleoclimatology Program.
- 15. External Review committee-University of California, Riverside, Department of Geological Sciences 2006.
- 16. Chair National Climate Science Working Group responsible for writing science plan for the NSF-Sponsored Climate Change Research Initiative-Paleo Perspectives on Climate Change (P2C2) 2006-2007.
- 17. Chair Faculty Search Committee for a Senior Climate Scientist at USC 2006-2007.
- 18. Invited Lecturer 2007 World Affairs Council
- 19. Committee of Visitors, National Science Foundation, Division of Atmospheric and GeoSpace Science 2010
- 20. National Ocean and Atmospheric NOAA Review Committee, Climate Change and Monitoring Program, 2010
- 21. European Science Foundation 2006 Expert External Reviewer
- 2010 Expert External Review Panel for EuroMARC Program
- 22. Intergovernmental Panel on Climate Change (IPCC) 2006 Contributing Editor, Paleoclimate Chapter
- 23. External Review Committee
 - Department of Earth Science, University of California, Riverside 2006
- 24. Organizer NSF-sponsored Workshop, Benefit and Practicality of the Establishment of a Virtual Climate Institute on the West Coast; Los Angeles, California; Summer 2008
- 25. Organizer and Lead PI for an NSF Science and Technology Center: A Center for Regional Decadal Climate Predictions (CRDCP), 2009

MENTORING

Post-Doctoral Associates

Niklas Buenning 2010-

Kevin Cannariato 2005-2007

PhD Advisee

Ashish Sinha Ph.D. 1991-1997

Reetta Saiku Ph.D. 2003-2009

Max Berklehamer PhD., 2005-2010

Deborah Khider, PhD., 2006-2011

Justin Reuter, MS, 2006-2009, PhD 2010-

Mertcan Ozbakir, PhD 2010-

MS Advisee

Carol Tang M.S 1990-1993

Michael Neumann M.S. 1995-1998

Paola Gomez M.S. 2000-2004 Jennifer Holsten M.S. 2000-2003 Andres Martinez M.S. 2004-2007 Patrick Horan, MS., 2006-2010 Committee Member Hung-Chun Li PhD 1993-1998 Lei Wang PhD 1993 Yuhong Tang PhD 1994-1996 Yi Zhou Ph.D. 1995 Rebecca Robinson M.S. 1995-1998 Dorte Paulsen MS. 1997-2000 Jian Peng Ph.D. 2001-2005 Maria Prokopenko Ph.D. 2001-2005 Francesca Staines-Urias MS. 2001-2006 Isabel Romero Ph.D. 2004-2006 (marine Bio) Vincent Todd Ph.D. 2004-2008 Peter Countway Ph.D. 2004-2008 (marine Bio) Miranda Hayman Ph.D 2006-2009 (Chemistry)

SEA AND FIELD EXPERIENCE

2001-2010 Field Programs in California, Caribbean, Indonesia, Iraq, Peru, SE. Asia 2001 Chief Scientist R/V New Horizon, California Margin 1995 Co-Chief Scientist R/V Ewing, California Margin 1990 R/V Atlantis II, California Borderlands 1986-87 Joides Resolution Leg 113, Weddell Sea, Antarctica 1984 R/V Hero, Southeast Pacific, Chile Margin 1983-84 Reedy Glacier Expedition, Transantarctic Mts., Antarctica 1983 R/V Hero, Southeast Pacific, Chile Margin

PUBLICATIONS

Refereed Papers

- in press Berkelhammer, M., Stott, L., Yoshimura, K., Sinha, A., and K. Johnson. Synoptic and mesoscale controls on the isotopic composition of precipitation in the western United States, *Climate Dynamics*.
- 2011 Stott, L. and Timmermann, A., Hypothesized Link between Glacial/Interglacial Atmospheric CO₂ Cycles and Storage/Release CO₂-Rich Fluids from the Deep Sea. AGU Geophysical Monograph Series: Understanding the Causes, mechanisms and extent of the Abrupt Climate Change. pdf
- Khider, D., L. D. Stott, L., Emile-Geay, J., Thunell, R. and Hammond, D., Assessing El Niño Southern Oscillation Variability during the Past Millennium,

 Paleoceanography, doi: 10.1029/2011PA002139. pdf

- Meister, P., Reyes, C., Beaumont, W., Rincon, M., Collins, L., Berelson, W., Stott, L., Corsetti, F., and Nealson, K. H., 2011, Calcium and magnesium-limited dolomite precipitation at Deep Springs Lake, California: *Sedimentology*, p. no-no.
- Sinha, A., Stott, L., Berkelhammer, M., Cheng, H., Edwards, R.L., Buckley, B., Aldenderfer, M., Mudelsee, M. Global Context for Megadroughts in Monsoon Asia during the Past Millennium. *Quaternary Science Reviews*. Volume 30, Issues 1-2, January 2011, Pages 47-62
- 2010 Magana, A. L., Southon, J. R., Kennett, J. P., Roark, E. B., Sarnthein, M. and **Stott.** L. D., Resolving the cause of large differences between deglacial benthic foraminifera radiocarbon measurements in Santa Barbara Basin, *Paleoceanography*, 115, PA4102, doi: 10.1029/2010PA002011.
- Newton, A., Thunell, R., Stott, L. (2010) Changes in the Indonesian Throughflow during the Past 2,000 Years. *Geology*.39; no. 1; p. 63–66; doi: 10.1130/G31421.1
- 2010 Stott, L. D. No signs of Southern Ocean CO₂. *Nature Geoscience* 3, pp. 153-154, doi: 10.1038/ngeo815.
- 2010 Stott, L. D., The Oceanic Climate Capacitor. In Andrew Miall (Ed.), 1. *Geoscience Canada*.
- Reuter, J., Stott, L., Khider, D., Sinha, A., Cheng, H. and Edwards, R. L., A new perspective on hydroclimate variability in northern South America during the Little Ice Age. *Geophyscial Research Letters*. doi:10.1029/2009GL041051, pdf.
- Saikku, R., Stott, L., and Thunell, R., A bi-polar signal recorded in the western tropical Pacific: Northern and Southern Hemisphere climate records from the Pacific warm pool during the last Ice Age. *Quaternary Science Reviews* pdf
- Berkelhammer, M., and Stott, L. D., Modeled and observed intra-ring δ¹⁸O cycles within late Holocene Bristlecone Pine tree samples. *Chemical Geology* **264**, 13-23.pdf
- 2009 Stott, L., Southon, J., Timmermann, A., and Koutavas, A., Radiocarbon age anomaly at intermediate water depth in the Pacific Ocean during the last deglaciation.

 *Paleoceanography 24.PA2223, doi: 10.1029/2008PA001690.pdf
- Timmermann, A., Timm, O., Stott, L., and & Menviel-Hessler, L., The roles of CO₂ and orbital forcing in driving southern hemispheric temperature variations during the last 21,000 year. *Journal of Climate* 22, 1626-1640.pdf
- Berkelhammer, M., and Stott, L., Recent and dramatic changes in Pacific storm trajectories recorded in δ¹⁸O from Bristlecone Pine tree-ring cellulose. *Geochemistry*, *Geophysics*, *Geosystems* 9,4, Q04008, doi:10.1029/2007GC001803 pdf
- 2007 Sinha, A., Cannariato, K., Stott, L., Cheng, H., Edwards, R.L., Yadava, R. Ramesh, M. G., and Singh, I. B., A 900-year (600 to 1500 A.D.) record of the Indian Summer Monsoon precipitation from the core monsoon zone of India. Geophysical Research Letters, 34, L16707 doi:10.1029/2007GL030431, pdf
- Stott, L., Timmerman, A., Thunell, R., Southern Hemisphere and Deep-Sea Warming Led Deglacial Atmospheric CO₂ Rise and Tropical Warming, *Science*. 318, 435-438.
- 2007 Graham, N. E., Hughes, M. K., Ammann C. M., Cobb, K. M., Hoerling M. P., Kennett D. J., Kennett JP, Rein, B., Stott, L., Wigand PE, Xu T.Y. Tropical Pacific midlatitude teleconnections in medieval times. *Climatic Change*, 83 (1-2): 241-285.
- 2007 Stott, L. D., Comment on "Anomalous radiocarbon ages for foraminifera shells" by W. Broecker et al.: A correction to the western tropical Pacific MD9821-81 record. *Paleoceanography*, 22 (1).

- 2006 Barker, S, Broecker, W., Clark, E., Hajdas, I., Bonani, G., Moreno, E., Stott, L.Radiocarbon age of deglacial-age water from 2.8 km depth in the Western Equatorial Pacific, Geochemistry, Geophysics, Geosystems
- Lund, S., Stott, L. D., Schwartz M., Thunell, R., Chen, A., Holocene paleomagnetic secular variation records from the western Equatorial Pacific Ocean. *Earth and Planetary Science Letters*, 246, 381–392.
- Newton, A., Thunell, R. and Stott, L. Climate and hydrographic Pacific warm pool during the last millennium, *Geophysical Research Letters.*, 33, L19710, doi: 10.1029/2006GL027234, 2006
- Prokopenko,M. G., Hammond, D. E., Spivack, A., and Stott, L. Impact of Long-Term diagenesis on δ¹⁵N of Organic Matter in Marine Sediments: Sites 12227 and 12301.
 In, Jørgensen, B.B., D'Hondt, S.L., and Miller, D.J. (Eds.) Proceedings of the Ocean Drilling Program, Scientific Results Volume 201
- 2006 Prokopenko M. G., Hammond D. E., Berelson, W. M., Bernhard J. M., **Stott,** L., Douglas, R. Nitrogen cycling in the sediments of Santa Barbara basin and Eastern Subtropical North Pacific: Nitrogen isotopes, diagenesis and possible chemosymbiosis between two lithotrophs (Thioploca and Anammox) "riding on a glider" *Earth and Planetary Letters*, 242 (1-2): 186-204.
- Sinha, A., Cannariato, K. G., Stott, L. D., Li, H.-C., You, C.-F., Cheng, H., Edwards, R. L., and Singh, I. B., 2005, Variability of Southwest Indian summer monsoon precipitation during the Bolling-Allerod: *Geology*, v. 33, p. 813-816.
- 2004 Stott, L., Cannariato, K., Thunell, R., Haug, G.H., Koutavas, A., and Lund, S. Decline of surface temperature and salinity in the western tropical Pacific Ocean in the Holocene epoch: *Nature*, v. 431, p. 56-59.
- 2004 Broecker, Wallace, Barker, S., Clark, E., Hajdas, I, Bonani, G. and **Stott**, L. Ventilation of the Glacial Deep Pacific Ocean, *Science*, 306, 1169-1172.
- 2004 Holsten, J., Stott, L., and Berelson, W., Reconstructing Benthic Carbon Oxidation Rates Using δ^{13} C of Benthic Foraminifers. *Marine Micropaleontology* 53 (2004) 117–132
- Cannariato, K., and **Stott**, L. D. High-resolution bulk organic carbon δ¹³C values argue against brief catastrophic releases of sedimentary methane to the surface waters of Santa Barbara Basin *Geochemistry*, *Geophysics*, *Geosystems* 5(5), doi: 10.1029/2003GC000 600
- 2004 Rosenthal, Y. et al., Inter-laboratory comparison study of Mg/Ca and Sr/Ca measurements in planktonic foraminifera for paleoceanography research.

 Geochemistry, Geophysics, Geosystems 5(4) doi:10.1029/2003GC000650
- Aubry, M.-P., Berggren, W.A., van Couvering, J.A., Ali, J., Brinkhuis, H., Cramer, B., Kent, D.V., Swisher, III, C.C., Gingerich, P.R., Heilmann-Clausen, C., Knox, R.W.O'B., Laga, P., Steurbaut, E., Stott, L.D., and Thiry, M., 2003. Chronostratigraphic Terminology at the Paleocene-Eocene Boundary. In: S.L. Wing, P.R. Gingerich, B. Schmitz and E. Thomas (eds). Causes and Consequences of Globally Warm Climates in the Early Paleocene. Geological Society of America (GSA) Special Paper 369, p. 551-566.
- 2003 Berelson, W. and Stott, L. D. Productivity and Organic Carbon Rain to the California Margin Sea Floor: Modern and Paleoceanographic Perspectives, *Paleoceanography* 18,

- 2003 Leavitt, S. W. S. B. Idso, B. A. Kimball, J. M. Burns, A. Sinha, L. Stott. The effect of long-term atmospheric CO₂ enrichment on the intrinsic water-use efficiency of sour orange trees. *Chemosphere*, 50, 217-222.
- 2003 Berelson, W. and Stott, L. D. Productivity and Organic Carbon Rain to the California Margin Sea Floor: Modern and Paleoceanographic Perspectives, *Paleoceanography* 18,
- Visser, K, Thunell, R., and **Stott**, L. Magnitude and timing of temperature change in the Indo-Pacific warm pool during deglaciation. *Nature*, 421, 152-155.
- 2002 Stott, L. D., Poulsen, C., Lund, S., and Thunell, R., Super ENSO and Global Climate Oscillations at Millennial Time Scales, *Science* 297, 222-226.
- 2002 Stott, L. D. The influence of diet on the δ^{13} C of shell carbon in the pulmonate snail Helix aspersa. Earth and Planetary Science Letters 195, 249-259.
- Stott, L. D., Bunn, T., Prokopenko, M., Mahn, C., Gieskes, J. and Bernhard, J. Does the oxidation of methane leave an isotopic fingerprint in the geologic record? *Geochemistry, Geophysics, Geosystems.* 3(2), 10.1029/2001GC000196.
- Herbert, T. D., Schuffert, J. D., Andreasen, D., Heusser, L., Lyle, M., Mix, A., Ravelo, A.C., Stott, L.D., and Herguera, J.C. Collapse of the California Current during glacial maxima linked to climate change on land. *Science*, 293: 71-76.
- 2000 Stott, L. D. Berelson, W., Gorsline, D., Douglas, R. Increased dissolved oxygen in Pacific Intermediate waters due to lower rates of carbon oxidation in sediments. *Nature*407, 367-370.
- 2000 **Stott**, L.D., Neumann, M., and Hammond, D. Intermediate water ventilation on the northeastern Pacific margin during the late Pleistocene inferred from benthic foraminiferal δ¹³C. *Paleoceanography*. 15 (2), 161-169.
- Li, H-C., Bischoff, J. L., Ku, T-L., Lund, S. P., and Stott. L. D. Climate variability in East Central California during the past 1000 years: High resolution geochemical and isotopic records from Owens Lake sediments, *Quaternary Research* 54, 189-197.
- 2000 Broecker, W. S., Clark, E., Lynch-Steiglitz, J., Beck, W., and Stott, L. D. Late Glacial diatom accumulation at 9°S in the Indian Ocean. *Paleoceanography*. 15(3), 348 352.
- 2000 Cojan, I., Moreau, M. G., and Stott, L. D. Stable carbon isotope stratigraphy of the Paleogene pedogenic series of southern France as a basis for continental-marine correlation *Geology*. 28(3) 259-262.
- Li, H.-C. H.-C. Li, Ku, T.-L. Stott, L. D. and Chen, W.-J. Applications of interannual resolution stable isotope records of speleothems: Climatic changes in Beijing and Tianjin, China during the past 500 years the δ^{18} O record. Science in China (Series D), 41 (4): 362-368. (SCI Journal).
- Li, H.-C., Ku, T.-L. Bischoff, J. L. and Stott, L. D. Climatic and hydrologic conditions in Owens Basin, California between 45 and 145 Ka as reconstructed from the high-resolution stable isotope records. p. 66-81. In: J. L. Bischoff (ed.). The Last Interglaciation at Owens Lake, California: Core OL-92. *U.S. Geological Survey*, *Open-File Report* 98-132, 186p.
- 1997 Li, H-C, Stott, L. D. and Hammond, D. E. Temperature and salinity effects on ¹⁸O fractionation for rapidly precipitated carbonates: Laboratory experiments with alkaline lake water. *Episodes* 20: 193-198.

- Li, H-C, Ku, T-L., and Stott, L. D. Stable isotope studies on Mono Lake (California) I: δ¹⁸O in Lake Sediments as proxy for climatic change during the last 150 years.
 Limnology and Oceanography.
- Li, H.-C. Ku, T.-L., Stott, L. D. and Anderson, R. F. Stable isotope studies on Mono Lake (California) -- I: δ¹⁸O in lake sediments as proxy for climatic change during the last 150 years. *Limnology and Oceanography*, 42 (2): 230-238.
- 1996 Stott, L.D. Hayden, T.P., Griffith, J. Benthic foraminifera at the Los Angeles County Whites Point Outfall revisited. *Journal of Foraminiferal Research*. 26:357-368
- 1996 Stott, L.D., Sinha, A., Thiry, M. Aubry, M.-P., Berggren, W. Global δ¹³C changes across the Paleocene/Eocene boundary: Criteria for terrestrial-marine correlations, *Special Publication of the Geological Society of London* 381-399.
- 1996 Stott, L.D., and Tang, C.M. Reassessment of Tropical sea surface δ¹⁸O paleotemperatures, *Paleoceanography*, 11: 37-56.
- Aubry, M.-P., Berggren, W. A., Stott, L. D. and Sinha, A., The upper Paleocene-lower Eocene stratigraphic record and the Paleocene/Eocene boundary carbon isotope excursion. In: Knox, R. (ed.) Early Paleogene correlation in NW Europe. Correlation of the Early Paleogene in Northwest Europe. Special Publication of the Geological Society of London., pp. 353-380.
- Mortyn, P. G., Thunell, R. C., Anderson, D. M, **Stott**, L. D., and Le, J. Sea surface temperature changes in the southern California Borderlands during the last glacial-interglacial cycle. *Paleoceanography*. 11:415-430.
- Sinha, A., Aubry, M.-P., **Stott**, L. D., Thiry, M. and Berggren, W. A. 1996.
 Chemostratigraphy of the "lower" Sparnacian deposits (Argiles plastiques bariolees) of the Paris Basin. *Israel Journal of Earth Sciences*, Special volume on Paleocene/Eocene boundary events. 44:223-237.
- 1995 Kennett, J. K., and Stott, L. D., Terminal Paleocene mass extinction in the deep sea: association with global warming, (in) *The Effects of Past Global Change on Life*, (eds) Stanley, S., Kennett, J.P., and Knoll, A., *National Research Council, National Academy Press*, 94-106.
- Hagadorn, J. W., Stott, L. D., Sinha, A., and Rincon, M., Geochemical and sedimentologic variations in inter-annually laminated sediments from Santa Monica Basin, *Marine Geology*, 125, 111-131.
- Sinha, A. and Stott, L. D., New atmospheric pCO₂ estimates from paleosols during the late Paleocene/early Eocene global warming interval, *Journal of Global and Planetary Change*. 9:297-307.
- Zachos, J. C., Stott, L. D., and Lohmann, K. C., Evolution of early Cenozoic marine temperatures, *Paleoceanography*, 9:353-387.
- Tang, C. M., and **Stott**, L. D., Seasonal salinity changes during Mediterranean sapropel deposition 9,000 years B.P.: Evidence from isotopic analyses of individual planktonic foraminifera, *Paleoceanography*, 8:473-494.
- 1993 Hagadorn, J. W., Flocks, J. G., **Stott**, L. D., and Gorsline, D. S., Micro-sampling of sediment cores: A simple method to obtain high resolution historical sedimentary records, *Journal of Sedimentary Petrology*, 62: 755-758
- 1992 **Stott**, L. D., Higher temperatures and lower oceanic pCO2: A climate enigma at the end of the Paleocene Epoch, *Paleoceanography7*: 395-404.

- Herguera, J.C., **Stott**, L., and Berger, W. H., Glacial deep water properties in the west-equatorial Pacific: Bathyal thermocline near 2000m depth. *Marine Geology*, 100:201-206.
- 1991 Kennett, J. P., and **Stott**, L. D., Abrupt deep-sea warming, palaeoceanographic changes and benthic extinctions at the end of the Palaeocene, *Nature*, 353:225-229.

 pdf
- 1990 Kennett, J. P. and Stott, L. D., Proteus and Proto-Oceanus: Paleogene oceans as revealed from Antarctic stable isotopic results. <u>In</u> Barker, P. F., Kennett, J. P., et al., *Proc. ODP, Scientific Results*, 113: College Station, TX (Ocean Drilling Progam), 865-880.
- 1990 Stott, L. D. and Kennett, J. P., Shackleton, N. S., and Corfield, R. M., The evolution of Antarctic surface waters during the Paleogene: Inferences from the stable isotopic composition of planktonic foraminifers, <u>In</u> Barker, P. F., Kennett, J. P., et al., *Proc. ODP*, *Scientific Results*, 113: College Station, TX (Ocean Drilling Program), 849-863.
- 1990 Stott, L. D. and Kennett, J. P. Antarctic Paleogene planktonic foraminifer biostratigraphy, <u>In</u> Barker, P. F., Kennett, J. P., et al., *Proc. ODP, Scientific_Results*, 113: College Station, TX (Ocean Drilling Program), 549-569.
- 1990 Stott, L. D. and Kennett, J. P., The Paleoceanographic and paleoclimatic signature of the Cretaceous/Paleogene boundary in the Antarctic, <u>In</u> Barker, P. F., Kennett, J. P., et al., *Proc. ODP*, *Scientific Results*, 113: College Station, TX (Ocean Drilling Program), 829-848.
- 1989 Stott, L. D. and Kennett, J.P., New constraints on early Tertiary palaeoproductivity from carbon isotopes in foraminifera. *Nature* 342(6249): 526-529. pdf
- 1989 Stott, L. D. and Webb, P. N., The *Neogloboquadrina continuosa* last appearance datum level in the South Pacific, *Micropaleontology* 35 (1), 63-71.
- Hess, J., Stott, L. D., Bender, M., Schilling, J.-G., Diachroneity in the Oligocene marine fossil record: High resolution age assessments using Sr isotopes, *Paleoceanography* 4 (6), 655-680.
- Barker, P. F., Kennett, J. P., et al., Weddell Sea Palaeoceanography: Preliminary Results of ODP Leg 113, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 67, 75-102.
- Webb, P. N., Harwood, D. M., McKelvey, B. C., Mercer, J. H., Stott, L. D., Cenozoic marine sedimentation and ice volume variation on the East Antarctic craton, *Geology*, 12, 287-291.

Non Refereed Papers

- 1984 DeVries, T. and Stott, L.D. Neogene fossiliferous deposits in Southern Chile, *Antarctic Journal of the United States*, 29:12-13.
- 1984 Stott, L.D., Harwood, D.M., McKelvey, B.C., and Webb, P.N. A revision of the ages of Cenozoic erratics at Mt. Discovery and Minna Bluff, McMurdo Sound, Antarctica.

 Antarctic Journal of the United States, 1983 Review.
- 1993 Stott, L.D., and Zachos, J. Paleogene Paleoceanography Workshop Report. An international workshop sponsored by Joint Oceanographic Institutions and United State Science Advisory Committee. Held at Lake Arrowhead California